AUTHOR INDEX TO VOLUME 141

Abdullaev, F.Kh., S.A. Darmanyan and M.R. Djumaev, Stochastic parametric resonance of solitons 141 (1989) 423
Aceves, A.B. and S. Wabnitz, Self-induced transparency solitons in nonlinear refractive periodic media 141 (1989) 37
Adhikari, R., R. Dutt and Y.P. Varshni, Exact solutions for polynomial potentials using supersymmetry inspired factorization method 141 (1989) 1
Afanasenko, V.P., V.G. Baryshevsky, O.T. Gradovsky, R.F. Zuevsky, M.G. Livshits, A.S. Lobko, V.I. Moroz, V.V. Panov, I.V. Polikarpov, P.F. Safronov, D.S. Shvarkov and A.O. Yurtsev, Detection of parametric X-ray radiation of a GaAs monocrystal 141 (1989) 311
Ahmed, E., A. Tawansi and M.A. Soliman, Grey scaling, a new approximation for random resistor networks 141 (1989) 301
Al-Jishi, R., see A. Das 141 (1989) 186
Amin, M.R., see B. Talukdar 141 (1989) 326
Anandan, J. and A. Pines, Non-Abelian geometric phase from incomplete quantum measurements 141 (1989) 335
Aslangul, C., N. Pottier and D. Saint-James, Random walk on a one-dimensional random lattice: equivalence between bond disorder and site disorder models 141 (1989) 172

Baier, G., K. Wegmann and J.L. Hudson, An intermittent type of chaos in the Belousov–Zhabotinsky reaction 141 (1989) 340
Bakhramov, S.A., A.T. Berdikulov, A.M. Kokharov and V.V. Tikhonenko, Self-induced optical activity (SIOA) in a resonant medium 141 (1989) 31
Bakirov, I.M. and V.Yu. Popkov, Completely integrable systems of brusselator type 141 (1989) 275
Banerjee, D., C. Ghosh and R. Bhattacharya, Change of sign of Hall coefficient with variation of magnetic field in acceptor doped Bi 141 (1989) 357
Baryshevsky, V.G., see V.P. Afanasenko 141 (1989) 311
Beideck, D.J., see R.R. Haar 141 (1989) 131
Ben-Aryeh, Y. and B. Huttner, Squeezed states produced by phase conjugation 141 (1989) 367
Benoit, W., see J.S. Zhu 141 (1989) 177
Berdikulov, A.T., see S.A. Bakhramov 141 (1989) 31
Bhagwat, K.V. and S.V. Lawande, A new derivation of the Feynman propagator for an inverse square potential 141 (1989) 321
Bhandari, R., Synthesis of general polarization transformers. A geometric phase approach, Phys. Lett. A 138 (1989) 469. Erratum 141 (1989) 438
Bhattacharya, R., see D. Banerjee 141 (1989) 357
Bikbaev, R.F., Structure of a shock wave in the theory of the Korteweg–de Vries equation 141 (1989) 289
Boiti, M., J.J.-P. Leon and F. Pempinelli, Spectral transform and orthogonality relations for the Kadomtsev–Petviashvili I equation 141 (1989) 96
Boiti, M., J.J.-P. Leon and F. Pempinelli, A new spectral transform for the Davey–Stewartson I equation 141 (1989) 101
Bombelli, L. and D.A. Meyer, The origin of Lorentzian geometry 141 (1989) 226

Bose, S.K. and N. Varma, Exact solution of the Schrödinger equation for the central non-polynomial potential $V(r)=r^2+\lambda r^2/(1+gr^2)$ in two and three dimensions 141 (1989) 141

Cai, J.M. and A. Inomata, Path integral treatment of an anisotropic nonquadratic potential 141 (1989) 315
Calvão, M.O. and J.A.S. Lima, Nonstandard big bang models 141 (1989) 229
Carlen, E.A. and M.I. Loffredo, The correspondence between stochastic mechanics and quantum mechanics on multiply connected configuration spaces 141 (1989) 9
Caspers, W.J., Completeness of singlet pair states for quantum spin systems 141 (1989) 303
Choi, E.-Y., see S.-W. Kim 141 (1989) 238
Christodoulides, C., On Ampère's magnetostatic force law and the nature of the forces it predicts 141 (1989) 383
Cufaro Petroni, N., Stochastic mechanics and quantum interference 141 (1989) 370
Curtis, L.J., see R.R. Haar 141 (1989) 131

Darmanyan, S.A., see F.Kh. Abdullaev 141 (1989) 423
Das, A. and R. Al-Jishi, On the Beattie–Landsberg theory of interband Auger recombination in semiconductors 141 (1989) 186
Derzhko, O.V., see I.R. Yukhnovskii 141 (1989) 18
Djumaev, M.R., see F.Kh. Abdullaev 141 (1989) 423
Dutt, R., see R. Adhikari 141 (1989) 1
Dzuba, V.A., V.V. Flambaum and O.P. Sushkov, Summation of the high orders of perturbation theory for the parity nonconserving E1-amplitude of the 6s–7s transition in the caesium atom 141 (1989) 147

Ellis, D.G., see R.R. Haar 141 (1989) 131
Epstein, S.T., On zitterbewegung 141 (1989) 14
Erber, T. and S.J. Putterman, Quantum jumps in a single atom; prolonged darkness in the fluorescence of a resonantly driven cascade 141 (1989) 43
Exner, P., Resonances in curved quantum wires 141 (1989) 213

Faisal, F.H.M. and R. Genieser, Exact solution of the Kronig–Penney model of 1D crystals in strong laser fields 141 (1989) 297
Feeny, B.F. and F.C. Moon, Autocorrelation on symbol dynamics for a chaotic dry-friction oscillator 141 (1989) 397
Ferrari, V. and J. Ibañez, Gravitational interaction of massless particles 141 (1989) 233
Flambaum, V.V., see V.A. Dzuba 141 (1989) 147
Florjańczyk, M. and R. Tremblay, Periodic and solitary waves in bimodal optical fibres 141 (1989) 34
Foltin, J., Difference in high-temperature superconductivity of two families of cuprate oxides 141 (1989) 427
Forro, L., see L. Zuppiroli 141 (1989) 181
Fushchich, W.I. and R.Z. Zhdanov, On some new exact solutions of the nonlinear d'Alembert–Hamilton system 141 (1989) 113

Gallardo, M., see A.G. Trigueiros 141 (1989) 135
García-Sanz, J., see J. Jiménez-Fernández 141 (1989) 161
Gavai, R.V., S. Gupta, A. Irbäck, F. Karsch, S. Meyer, B. Petersson, H. Satz and H.W. Wyld, The finite temperature phase transition in flur flavour QCD on an 8×12^3 lattice 141 (1989) 391
Genieser, R., see F.H.M. Faisal 141 (1989) 297
Ghatak, K.P., see B. Mitra 141 (1989) 81

Ghosh, C., see D. Banerjee 141 (1989) 357
Giannini, J.A. and R.I. Joseph, The role of the second Painlevé transcendent in nonlinear optics 141 (1989) 417
Ginzburg, S.L., see I.D. Luzyanin 141 (1989) 85
Gong, D., see G. Qin 141 (1989) 412
Gopala Rao, R.V. and R. Venkatesh, Evaluation of electrical resistivities of Hg–In alloys 141 (1989) 78
Gradovsky, O.T., see V.P. Afanasenko 141 (1989) 311
Grozdanov, T.P., R.K. Janev and P.S. Krstić, Two-state model for electron capture in $H^+ + H_2$ collisions at keV impact energies 141 (1989) 346
Gupta, G.P., see A.C. Saxena 141 (1989) 157
Gupta, S., see R.V. Gavai 141 (1989) 391

Haar, R.R., T.J. Kvale, D.G. Ellis, I. Martinson, L.J. Curtis and D.J. Beideck, *J*-dependent lifetimes of quintet levels in neutral carbon 141 (1989) 131
Hess, B., see H. Miike 141 (1989) 25
Hirsch, J.E., Ferromagnetism in metallic hydrogen 141 (1989) 191
Hiscock, W.A. and T.S. Olson, Effects of frame choice on nonlinear dynamics in relativistic heat-conducting fluid theories 141 (1989) 125
Hu, Z., see R.-K. Su 141 (1989) 420
Hudson, J.L., see G. Baier 141 (1989) 340
Huttner, B., see Y. Ben-Aryeh 141 (1989) 367

Ibañez, J., see V. Ferrari 141 (1989) 233
Inomata, A., see J.M. Cai 141 (1989) 315
Irbäck, A., see R.V. Gavai 141 (1989) 391
Its, A.R., A.G. Izergin and V.E. Korepin, Correlation radius for one-dimensional impenetrable bosons 141 (1989) 121
Ivanov, B.A. and V.A. Stephanovich, Two-dimensional solitons dynamics in ferromagnets 141 (1989) 89
Izergin, A.G., see A.R. Its 141 (1989) 121

Janev, R.K., see T.P. Grozdanov 141 (1989) 346
Jennison, R.C., A new classical relativistic model of the electron 141 (1989) 377
Jiménez-Fernández, J. and J. García-Sanz, Surface deflection in Benard–Marangoni convection 141 (1989) 161
Johri, V.B. and R. Sudharsan, Energy creation and entropy production due to bulk viscosity during an instantaneous phase transition 141 (1989) 257
Joseph, R.I., see J.A. Giannini 141 (1989) 417
Jou, D., see V. Micenmacher 141 (1989) 165

Kalman, G., Dielectric function, Wigner crystal and Coulomb liquids 141 (1989) 433
Karsch, F., see R.V. Gavai 141 (1989) 391
Katou, K., Low-frequency nonlinear equations with inertial force term for toroidal plasmas 141 (1989) 48
Khavronin, V.P., see I.D. Luzyanin 141 (1989) 85
Kholodenko, A.L., Fermi–Bose transmutation and the theory of semiflexible polymer solutions 141 (1989) 351
Kim, S.-W., E.-Y. Choi, S.K. Kim and J. Yang, Black hole radiation in the Vaidya metric 141 (1989) 238
Kim, S.K., see S.-W. Kim 141 (1989) 238

Kokharov, A.M., see S.A. Bakhramov 141 (1989) 31
Kolassis, C. and N.O. Santos, Gravitational collapse of a radiating star 141 (1989) 243
Kolodii, V.N., see A.D. Pogrebnjak 141 (1989) 204
Korepin, V.E., see A.R. Its 141 (1989) 121
Kravchenko, S.V., V.M. Pudalov and S.G. Semenchinsky, Negative density of states of 2D electrons in a strong magnetic field 141 (1989) 71
Krstić, P.S., see T.P. Grozdanov 141 (1989) 346
Kvale, T.J., see R.R. Haar 141 (1989) 131

Lawande, S.V., see K.V. Bhagwat 141 (1989) 321
Leon, J.J.-P., see M. Boiti 141 (1989) 96, 101
Levitskii, R.R., see I.R. Yukhnovskii 141 (1989) 18
Li, R., see G. Qin 141 (1989) 412
Liebovitch, L.S. and T. Toth, A fast algorithm to determine fractal dimensions by box counting 141 (1989) 386
Lima, J.A.S., see M.O. Calvão 141 (1989) 229
Lin, C.-D., see T. Mukoyama 141 (1989) 138
Liñares, J., Maxwell paraxial wave optics in inhomogeneous media by path integral formalism 141 (1989) 207
Liu, M. and D.Y. Xing, Mean-field study of magnetic phase transitions in Ising superlattices 141 (1989) 363
Livshits, M.G., see V.P. Afanasenko 141 (1989) 311
Lobko, A.S., see V.P. Afanasenko 141 (1989) 311
Loffredo, M.I., see E.A. Carlen 141 (1989) 9
Logvinova, G.Yu., see I.D. Luzyanin 141 (1989) 85
Luzyanin, I.D., S.L. Ginzburg, V.P. Khavronin and G.Yu. Logvinova, The higher harmonics of magnetization in the critical state of ceramic high-T_c superconductors 141 (1989) 85
Lychaghin, D.V., see A.D. Pogrebnjak 141 (1989) 204

Makhankov, V.G. and O.K. Pashaev, Supersymmetric integrable SU(2|1) Heisenberg models 141 (1989) 285
Makhmudov, N.A., see A.D. Pogrebnjak 141 (1989) 204
Malyshevsky, V.S., Coherent conversion radiation by a relativistic beam in non-equilibrium matter 141 (1989) 60
Manko, V.S., On a new static solution of the Einstein–Maxwell equations for a massive magnetic dipole 141 (1989) 249
Martinson, I., see R.R. Haar 141 (1989) 131
Meyer, D.A., see L. Bombelli 141 (1989) 226
Meyer, S., see R.V. Gavai 141 (1989) 391
Micenmacher, V. and D. Jou, On the convexity of a nonequilibrium entropy and shock waves 141 (1989) 165
Miike, H., S.C. Müller and B. Hess, Hydrodynamic flows traveling with chemical waves 141 (1989) 25
Mikhailovskii, A.B., A.M. Pukhov and O.G. Onishchenko, Numerical simulation of Kolmogorov spectra of long-wavelength drift turbulence 141 (1989) 154
Mirza, A.M., G. Murtaza and M.S. Qaisar, Heat transport formula in strongly inhomogeneous plasmas 141 (1989) 56
Mitra, B. and K.P. Ghatak, On the thermoelectric power in 3D quantum well structures of small-gap semiconductors in the presence of crossed strong magnetic and electric fields 141 (1989) 81

Moon, F.C., see B.F. Feeny 141 (1989) 397
Morimoto, Y., Transition phenomena in two interacting van der Pol oscillators 141 (1989) 407
Moroz, V.I., see V.P. Afanasenko 141 (1989) 311
Morrison, H.L., see A.D. Speliotopoulos 141 (1989) 278
Moser, P., see A. Sen Gupta 141 (1989) 429
MT_c Collaboration, see R.V. Gavai 141 (1989) 391
Mukoyama, T. and C.-D. Lin, Target atomic number dependence of projectile excitation cross sections of He-like iron ions 141 (1989) 138
Müller, S.C., see H. Miike 141 (1989) 25
Murtaza, G., see A.M. Mirza 141 (1989) 56

Nijhoff, F.W. and V. Papageorgiou, Lattice equations associated with the Landau–Lifschitz equations 141 (1989) 269
Nishi, Y., S. Takagi and K. Yasuda, T_c decay of high T_c $YBa_2Cu_3O_{7-y}$ radiated by an electron beam 141 (1989) 294
Novak, R.P., see I.R. Yukhnovskii 141 (1989) 18

Olson, T.S., see W.A. Hiscock 141 (1989) 125
Omeljanovsky, E.M., A.V. Pakhomov and A.Y. Polyakov, Charge state and hydrogen levels position in different III–V materials 141 (1989) 75
Onishchenko, O.G., see A.B. Mikhailovskii 141 (1989) 154

Pakhomov, A.V., see E.M. Omeljanovsky 141 (1989) 75
Panov, V.V., see V.P. Afanasenko 141 (1989) 311
Papageorgiou, V., see F.W. Nijhoff 141 (1989) 269
Pashaev, O.K., see V.G. Makhankov 141 (1989) 285
Pautrat, J.L., see A. Sen Gupta 141 (1989) 429
Pempinelli, F., see M. Boiti 141 (1989) 96, 101
Percoco, U. and V.M. Villalba, On the Dirac equation with a one-dimensional scalar potential 141 (1989) 221
Petersson, B., see R.V. Gavai 141 (1989) 391
Pettersson, S.-G., see A.G. Trigueiros 141 (1989) 135
Pines, A., see J. Anandan 141 (1989) 335
Pogrebnjak, A.D., Yu.P. Sharkeev, D.V. Lychaghin, N.A. Makhmudov, G.V. Pushkareva, I.G. Romanov and V.N. Kolodii, Relation of mechanical and frictional properties to defects in high power ion beam irradiated α-Fe 141 (1989) 204
Polikarpov, I.V., see V.P. Afanasenko 141 (1989) 311
Polyakov, A.Y., see E.M. Omeljanovsky 141 (1989) 75
Popkov, V.Yu., see I.M. Bakirov 141 (1989) 275
Pottier, N., see C. Aslangul 141 (1989) 172
Pudalov, V.M., see S.V. Kravchenko 141 (1989) 71
Pukhov, A.M., see A.B. Mikhailovskii 141 (1989) 154
Pushkareva, G.V., see A.D. Pogrebnjak 141 (1989) 204
Putterman, S.J., see T. Erber 141 (1989) 43

Qaisar, M.S., see A.M. Mirza 141 (1989) 56
Qin, G., D. Gong, R. Li and X. Wen, Rich bifurcation behaviors of the driven van der Pol oscillator 141 (1989) 412

Reineker, P. and R.G. Winkler, Deterministic chaos in the dynamics of a freely jointed molecular chain 141 (1989) 264
Reyna Almandos, J.G., see A.G. Trigueiros 141 (1989) 135
Rice-Evans, P.C. and D.L. Smith, Positronium from a gallium arsenide wafer surface 141 (1989) 201
Rohatgi, V.K., see A.C. Saxena 141 (1989) 157
Romanov, I.G., see A.D. Pogrebnjak 141 (1989) 204

Safronov, P.F., see V.P. Afanasenko 141 (1989) 311
Saint-James, D., see C. Aslangul 141 (1989) 172
Santos, N.O., see C. Kolassis 141 (1989) 243
Satz, H., see R.V. Gavai 141 (1989) 391
Saxena, A.C., G.P. Gupta and V.K. Rohatgi, Model electron velocity distributions for mirror-confined plasmas 141 (1989) 157
Schaller, R., see J.S. Zhu 141 (1989) 177
Scutaru, H., The states with Gaussian Wigner functions are quasi-free states 141 (1989) 223
Semenchinsky, S.G., see S.V. Kravchenko 141 (1989) 71
Sen Gupta, A., P. Moser and J.L. Pautrat, Positron annihilation studies in electron irradiated CdTe and CdTe (In) 141 (1989) 429
Shanley, P.E., Double wells, inverted wells, and level crossing 141 (1989) 331
Sharkeev, Yu.P., see A.D. Pogrebnjak 141 (1989) 204
Sheshadri, T.S., Influence of propellant choice on MPD arcjet cathode surface current density distribution 141 (1989) 169
Shiina, H., see C. Tanaka 141 (1989) 307
Shurigin, V.J. and R.M. Yulmetyev, Spin relaxation of spin density fluctuations in liquids 141 (1989) 196
Shvarkov, D.S., see V.P. Afanasenko 141 (1989) 311
Smith, D.L., see P.C. Rice-Evans 141 (1989) 201
Soliman, M.A., see E. Ahmed 141 (1989) 301
Speliotopoulos, A.D. and H.L. Morrison, The Hodge decomposition and the vortex Hamiltonian 141 (1989) 278
Squires, E., State reduction due to a fluorescent screen 141 (1989) 95
Stephanovich, V.A., see B.A. Ivanov 141 (1989) 89
Su, R.-K. and Z. Hu, The soliton solutions of the $(3+1)$-dimensional $\phi^3+\phi^4$ field at finite temperature 141 (1989) 420
Sudharsan, R., see V.B. Johri 141 (1989) 257
Sushkov, O.P., see V.A. Dzuba 141 (1989) 147

Tagami, Y., Soliton-like solutions to a $(2+1)$-dimensional generalization of the KdV equation 141 (1989) 116
Takagi, S., see Y. Nishi 141 (1989) 294
Takahashi, R., Negentropy in microdrops of water 141 (1989) 15
Talukdar, B., A. Yunus and M.R. Amin, Continuum states of the Klein–Gordon equation for vector and scalar interactions 141 (1989) 326
Tanaka, C. and H. Shiina, The effects of electron–phonon interaction and spin fluctuation on the temperature dependence of the magnetic susceptibility of a metal 141 (1989) 307
Tanaś, R., Squeezing from an anharmonic oscillator model: $(a^+)^2 a^2$ versus $(a^+a)^2$ interaction Hamiltonians 141 (1989) 217
Tawansi, A., see E. Ahmed 141 (1989) 301

Tikhonenko, V.V., see S.A. Bakhramov 141 (1989) 31
Toth, T., see L.S. Liebovitch 141 (1989) 386
Tremblay, R., see M. Florjańczyk 141 (1989) 34
Trigueiros, A.G., S.-G. Pettersson, J.G. Reyna Almandos and M. Gallardo, A study of the configurations 4s5s and 4s5p in six times ionized krypton (Kr VII) 141 (1989) 135

Varma, N., see S.K. Bose 141 (1989) 141
Varshni, Y.P., see R. Adhikari 141 (1989) 1
Venkatesh, R., see R.V. Gopala Rao 141 (1989) 78
Villalba, V.M., see U. Percoco 141 (1989) 221
Vlachos, K., Perturbation expansion for the partition function of a generalized anharmonic oscillator 141 (1989) 65

Wabnitz, S., see A.B. Aceves 141 (1989) 37
Wegmann, K., see G. Baier 141 (1989) 340
Wen, X., see G. Qin 141 (1989) 412
Winkler, R.G., see P. Reineker 141 (1989) 264
Wu, Y.L., see C.Q. Xia 141 (1989) 251
Wyld, H.W., see R.V. Gavai 141 (1989) 391

Xia, C.Q. and Y.L. Wu, Spin interference effects in the earth's field 141 (1989) 251
Xing, D.Y., see M. Liu 141 (1989) 363

Yamazaki, S., On the dynamical system $\dot{x}_k = -\exp[(x_{k-1} - x_{k+1})/2]$ 141 (1989) 401
Yang, J., see S.-W. Kim 141 (1989) 238
Yasuda, K., see Y. Nishi 141 (1989) 294
Yoshida, H., A criterion for the non-existence of an additional analytic integral in Hamiltonian systems with N degrees of freedom 141 (1989) 108
Yukhnovskii, I.R., R.R. Levitskii, O.V. Derzhko and R.P. Novak, Resonance irradiation influence on the gas–liquid phase transition 141 (1989) 18
Yulmetyev, R.M., see V.J. Shurigin 141 (1989) 196
Yunus, A., see B. Talukdar 141 (1989) 326
Yurtsev, A.O., see V.P. Afanasenko 141 (1989) 311

Zhdanov, R.Z., see W.I. Fushchich 141 (1989) 113
Zhou, P., Spin dependence of effective critical exponent of specific heat for the high-spin two-dimensional system 141 (1989) 63
Zhu, J.S., R. Schaller and W. Benoit, Relaxation peak near 200 K in NiTi alloy 141 (1989) 177
Zuevsky, R.F., see V.P. Afanasenko 141 (1989) 311
Zuppiroli, L. and L. Forro, Hopping conductivity in polaronic situations 141 (1989) 181